DNREC DIVISION OF AIR QUALITY

How DAQ Writes a Permit

Engineering & Compliance Section
Delaware Department of Natural Resources
and Environmental Control
Division of Air Quality

What Will I Talk About Today?

- The Importance of Permitting
- Air Permitting in Delaware
  - Refresher on different categories of air permits
  - Reviewing Permit Applications
  - Potential to Emit (PTE)
  - Permitting Processes
    - Registrations
    - Natural Minor Permits
    - Federally Enforceable Natural Minor Permits
    - Synthetic Minor Permits
  - Regulatory Review and Modeling
  - Legal Notices
  - Permit Numbers
  - Drafting Memos
  - Drafting Permits
  - Replacement in Kind

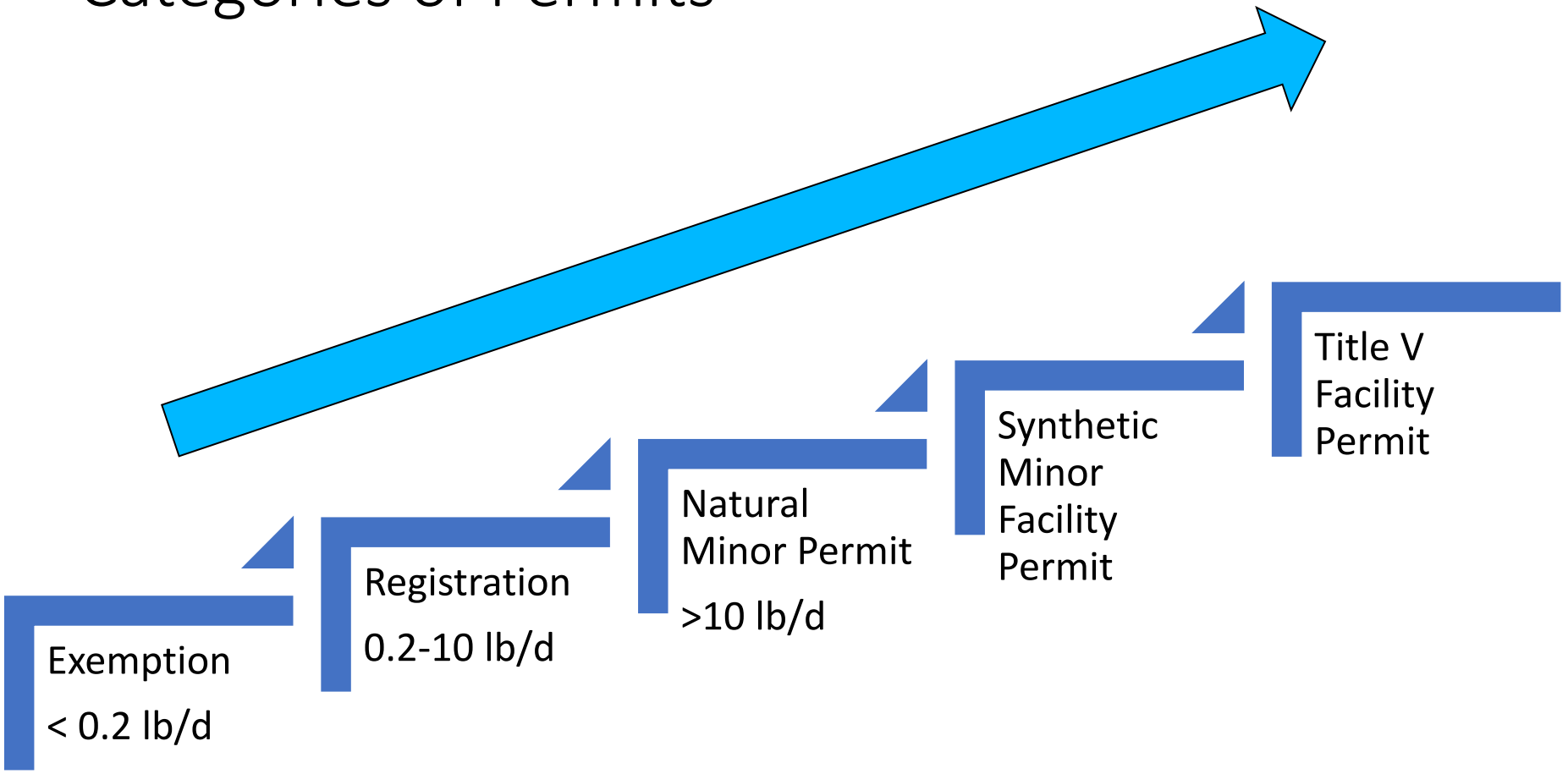
Why Are Permits Important?

- Permits outline what is required of the facility to operate in compliance with State and Federal requirements.
- Testing, recordkeeping, reporting and inspections ensure ongoing compliance.
- The public notice process and public records allow the community to know what is happening near their home.

Categories of Permits

- Categories are based on emissions (before a control device)
- Exemptions → less than 0.2 lb/day in the aggregate
- Registrations → 0.2 to 10 lb/day in the aggregate
- Natural Minor (also called Reg. 2 or Reg. 1102) → greater than 10 lb/day on any day
- Synthetic Minor (SM) → potential emissions restricted to remain below major source threshold
- Title V (TV) → potential emissions over major source threshold

Categories of Permits



Major Source Thresholds in Delaware

MAJOR SOURCE THRESHOLDS IN TONS PER YEAR				
	Volatile Organic Compounds, **VOC**	Nitrogen Oxides, **NOx**	Carbon Monoxide, **CO**	Sulfur Dioxide, **SO_2**
New Castle	25	25	100	100
Kent	25	25	100	100
Sussex	50	100	100	100

Major Source Thresholds in Delaware

MAJOR SOURCE THRESHOLDS IN TONS PER YEAR			
	Particulate Matter, **PM_{10}**	Hazardous Air Pollutants, **HAPs**	Other Air Pollutants
New Castle	100	10/25	100
Kent	100	10/25	100
Sussex	100	10/25	100

What about CO_2?

- Major Source “Anyway” program in Delaware triggered at 100,000 ton per year of CO_{2e}
- You must already be a major source of something else to be major for CO_2
- The Regional Greenhouse Gas Initiative (RGGI) program requires offset purchases/trades for energy generators >25 MW capacity in Delaware.
- CO_2 is also regulated in 7 DE Admin. Code 1144 for distributed generators

Reviewing Permit Applications

Application Forms

- AQM-1: Administrative Information
- AQM-2: Overall Process Flow Diagram
- AQM-3.X: Equipment Specifics
- AQM-4.X: Control Devices (if none, skip; if not sure, ask)
- AQM-5: Emissions Information – Really a Natural Minor?
- AQM-6: Air Dispersion Modeling
- Permit Application forms are available online
- DAQ is developing electronic permit applications through the e-permitting project

Reviewing Permit Applications

- Each permit application must go through two levels of review:
  - Administrative Completeness
  - Technical Completeness
- The Permit processing clock doesn't start until an application is both administratively and technically complete

Pre-Application Meeting

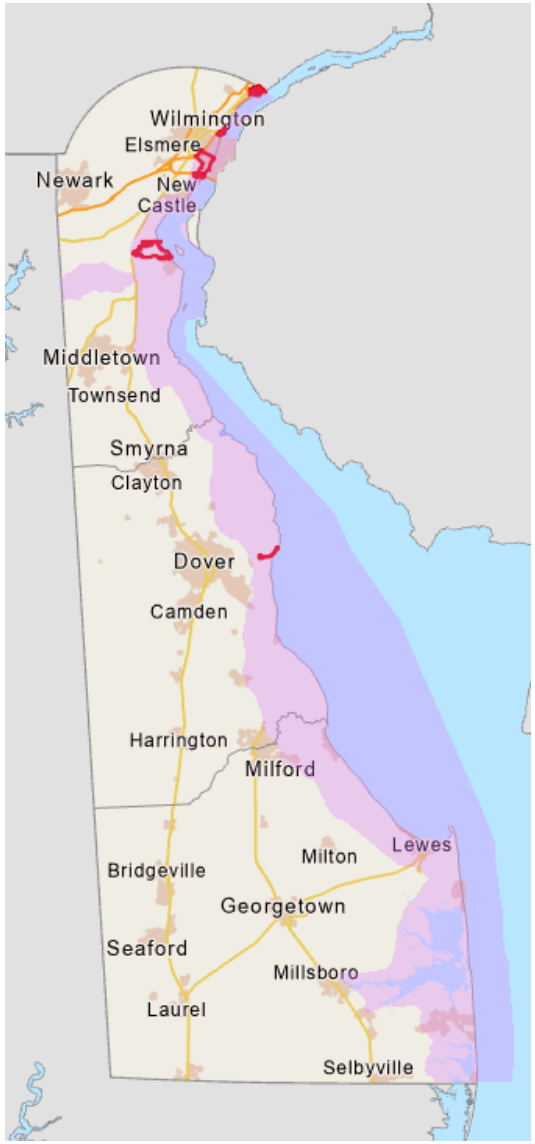
- If you need help completing a permit application, we encourage you to schedule a pre-application meeting
- During the pre-application meeting DAQ can:
  - Discuss applicable regulations
  - Comment on draft applications
  - Discuss the permitting process
  - Discuss monitoring and compliance strategies
- During the pre-application meeting DAQ can't:
  - Provide suggestions on equipment to use
  - Provide suggestions on how to operate the process

Administrative Completeness Review

- To be determined Administratively Complete an application must:
  - Have all of the boxes filled in
  - Be signed
  - Have emissions calculations or justifications attached
  - Have application and advertisement fees included
  - Have proof of local zoning
  - Have Coastal Zone approval if necessary
  - Have an Applicant Background Questionnaire if necessary
  - Have supporting documentation if confidentiality is requested
  - Have a cover letter describing the application request and process

Permit Fees

- Construction and Operating permit fees set in 1991
  - Construction application fees apply to all sources
  - Operation fees apply to Natural Minor sources
- Title V and Synthetic Minor Fees
  - Mandated by the Clean Air Act to be covered by the regulated sources
  - DNREC, Facilities, and the Delaware State Chamber of Commerce negotiate fees on a 3-year cycle



Coastal Zone Approval

- Facilities located in the Coastal Zone are subject to another layer of approval
- https://dnrec.alpha.delaware.gov/coastal-zone-act/
- DAQ can't process a permit until Coastal Zone approval has been obtained
- Any permit limits in the Coastal Zone Permit that apply to air emissions will also be included in the air permit

Local Zoning Approval

- 7 Del. Code § 6003 (c)(1) states:
  - No permit may be granted unless the county or municipality having jurisdiction has first approved the activity by zoning procedures provided by law.
- All permit applications for a new facility must include proof of local zoning through a letter from the municipality stating that the intended use is allowed at that location
- Simply printing out a zoning map or stating the parcel zoning is not considered proof of local zoning

Applicant Background Statement

- Required for a company that has not held an environmental permit in Delaware in the past five years.
- https://documents.dnrec.delaware.gov/services/Documents/Chapter79Form.pdf
- Information required includes:
  - Company ownership
  - Disclosure of environmental violations and settlements

Confidentiality

- Ensuring proper documentation of confidentiality claims is the responsibility of the applicant and must be included at the time the alleged confidential information is submitted to the Department
- Unilateral assertion that a record is confidential is insufficient evidence to support the Secretary in making a determination of confidentiality
- Confidentiality requests must be submitted pursuant to Department requirements: https://regulations.delaware.gov/AdminCode/title8/900.shtml#TopOfPage

Confidentiality

- Confidentiality claims must include:
  - Two public versions of the entire package of information that is submitted for determination, with alleged confidential information redacted (this version will be made available for public review). The public versions shall correspond page for page with the confidential versions, with the confidential portions having been redacted;
  - Two confidential versions of the entire package of information that is submitted for determination, that includes the alleged confidential information (this version will be used internally for technical review); and
  - Certification through a separate, notarized affidavit that the information is either trade secret or commercial/financial information that is of a confidential nature. The affidavit will be signed by the Responsible Official.
  - Substantiation to support the confidentiality claim.

Technical Completeness Review

- The Technical Completeness review is conducted by the permitting engineer
- To be determined Technically Complete, an application must:
  - Have a completed application form for each of the emission units and control devices
  - Have emissions information
  - Provide calculations
  - Provide manufacturer’s specification and other technical information
- The permitting engineer will determine if the emissions calculations are correct as part of the Technical Completeness review

Information Requests

- If additional information is required to achieve administrative or technical completeness, DAQ will request that information
- It is in your best interest to respond as soon as possible
- If the information is not received DAQ will return your application

Potential to Emit

Calculating Potential to Emit (PTE)

- Once an application is administratively and technically complete DAQ will calculate PTE
- PTE calculations are the essential first step in developing a permit
- PTE determines the type of permit that is issued and the regulatory requirements that apply

Calculating Potential to Emit

- EPA definition of PTE:

  "Potential to Emit" is the maximum capacity of a stationary source to emit under its physical and operational design. Any physical or operational limitations on the source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the (EPA) Administrator.

Interpretation

- "Potential to Emit" is the maximum capacity *(typically 8,760 hours)* of a stationary source to emit under its physical and operational design. Any physical or operational limitations on the source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the (EPA) Administrator *(federally enforceable synthetic minor limitations)*.
- Based upon this interpretation, control devices can only reduce potential to emit when they are federally enforceable

Inherent Constraints

- EPA recognizes that there are sources: "...for which the theoretical use of equipment is much higher than could ever actually occur in practice. For such facilities, if their physical limitations or operational design features are not taken into account, the potential emissions could be overestimated and the source owner could be subject to the Act requirements affecting major sources. Although such source owners could accept enforceable limitations restricting the operation to its designed level, the EPA believes this administrative requirement to be unnecessary and burdensome."[1]

[1]Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities dated November 14, 1995

So What Does This Mean?

- You do not always have to use 8,760 hours of operation when calculating PTE
- You must calculate PTE based upon a source's "maximum capacity to emit under its physical and operational design"
- For most sources, the maximum capacity to operate is 8,760 hours per year.
- However, some sources have inherent constraints in their physical and operational design that restrict potential emissions.
- Operating schedules ARE NOT inherent constraints

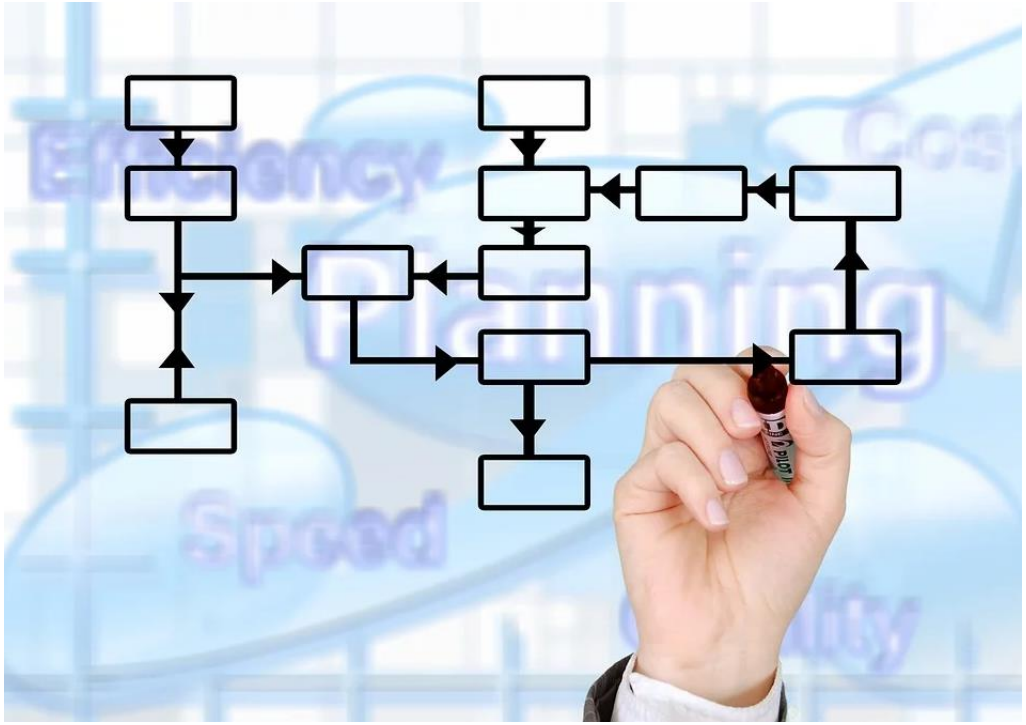
Inherent Constraints

- Inherent constraints can typically only be applied to single-emission type operations.
- EPA has specifically recognized that small auto body shops, grain handling facilities and batch chemical production operations have inherent constraints in their physical and operational design.
- DAQ has applied the inherent constraints concept to other coating sources, other batch processes and specialty gas production.
- The key is the source must have a **relatively simple process** with **easily identifiable limitations** to their operations.

Using Emission Factors

- When calculating PTE you should use emission factors in the following hierarchy:
  1. Stack test results of the equipment at the facility
  2. Stack test results of the same equipment at another facility
  3. Manufacturer's provided emission factors
  4. AP-42 emission factors
  5. Other reasonable emission factors (discuss with DAQ)

Permitting Processes



Categories of Permits

- Registrations
- Natural Minor Permit
- Synthetic Minor Permit
- Natural Minor Permit at a Title V facility
- Federally Enforceable Permit at a TV facility

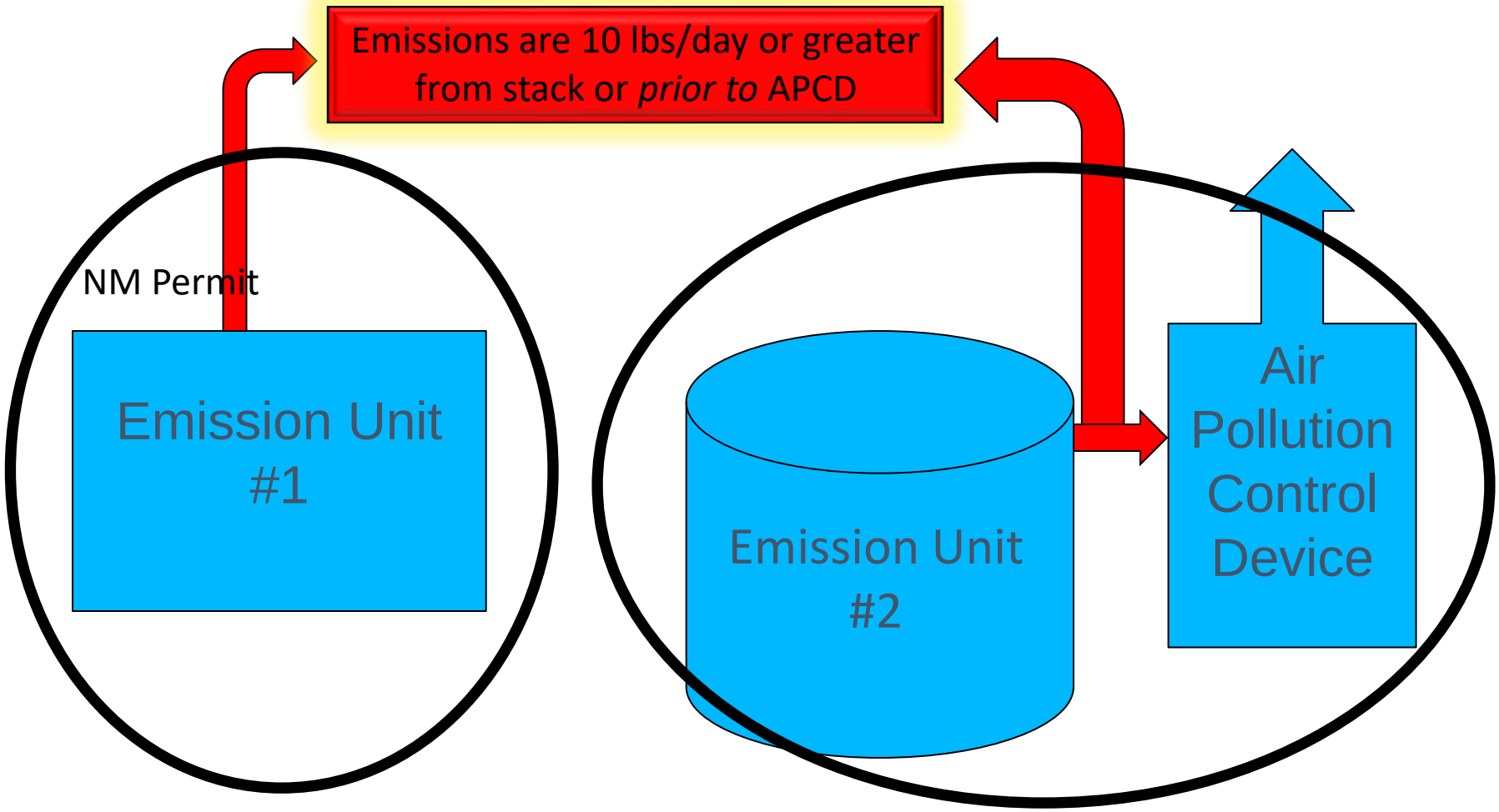
Registrations

- Covered Under 7 DE Admin. Code 1102 Section 2.1.1
- The Registration process should only be used when **pre-control** emissions are between 0.2 and 10 pounds per day and 7 DE Admin. Code 1125 does not apply.
- There are two types of Registration processes:
  - Self-Registration: Applicant can begin operation immediately upon submittal
  - Standard Registration: Applicant can begin operation upon receipt of approval by Department
- It's important to keep track of your facility wide PTE, small processes may be exempt individually, but many at one facility may make the facility a major source

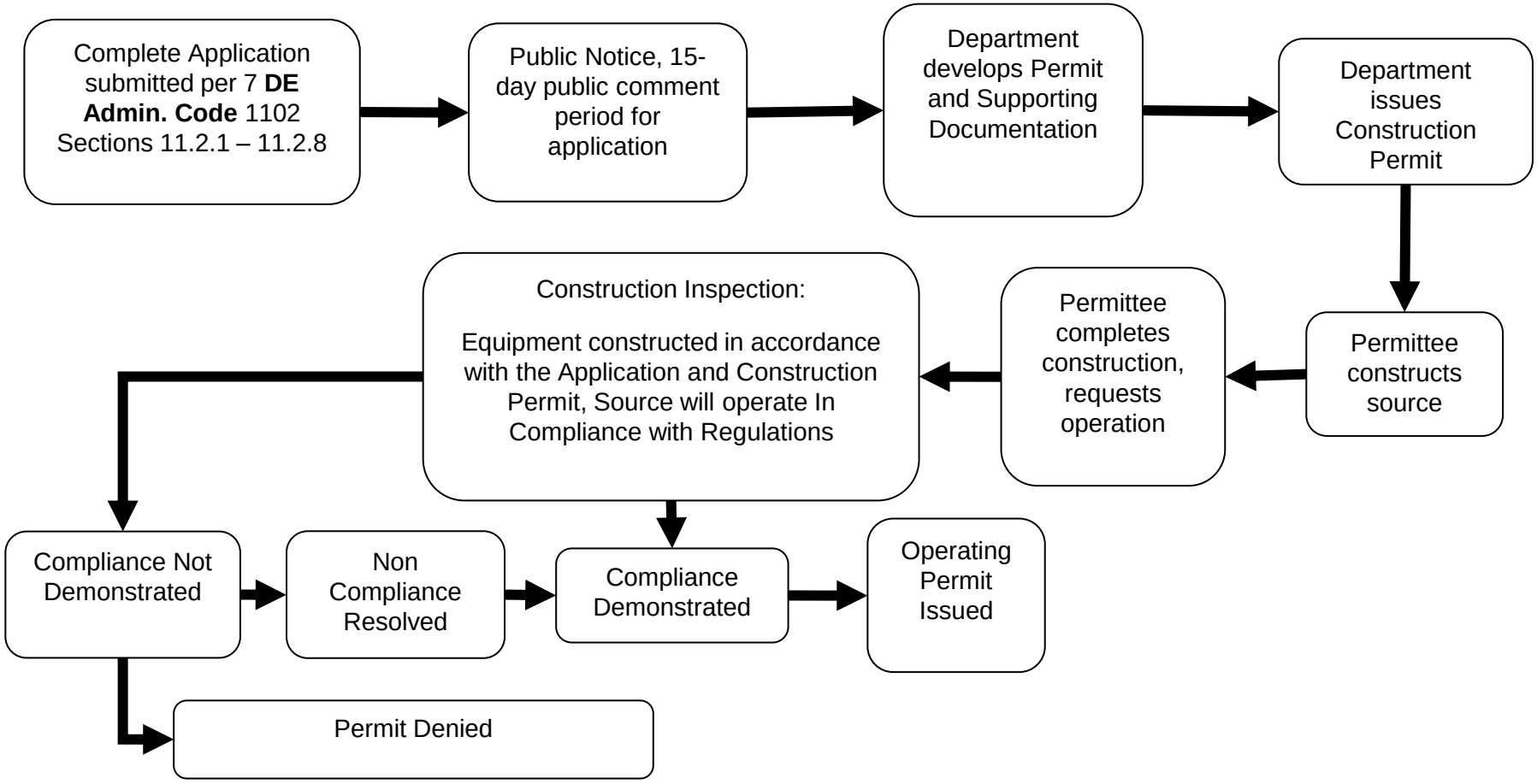
Natural Minor Permitting

- Covered under 7 DE Admin. Code 1102 Section 2.1.
- Application requirements are covered under 7 DE Admin. Code 1102 Sections 11.2.1 through 11.2.8.
- Public Participation requirements are covered under 7 DE Admin. Code 1102 Sections 12.1 and 12.2.
- The natural minor permitting process should be used when the potential to emit is below the major source threshold for all pollutants emitted before the control device.
- Natural Minor permits are issued for individual equipment or process chains.

Natural Minor Permitting



Natural Minor Permitting



Construction to Operation Inspection

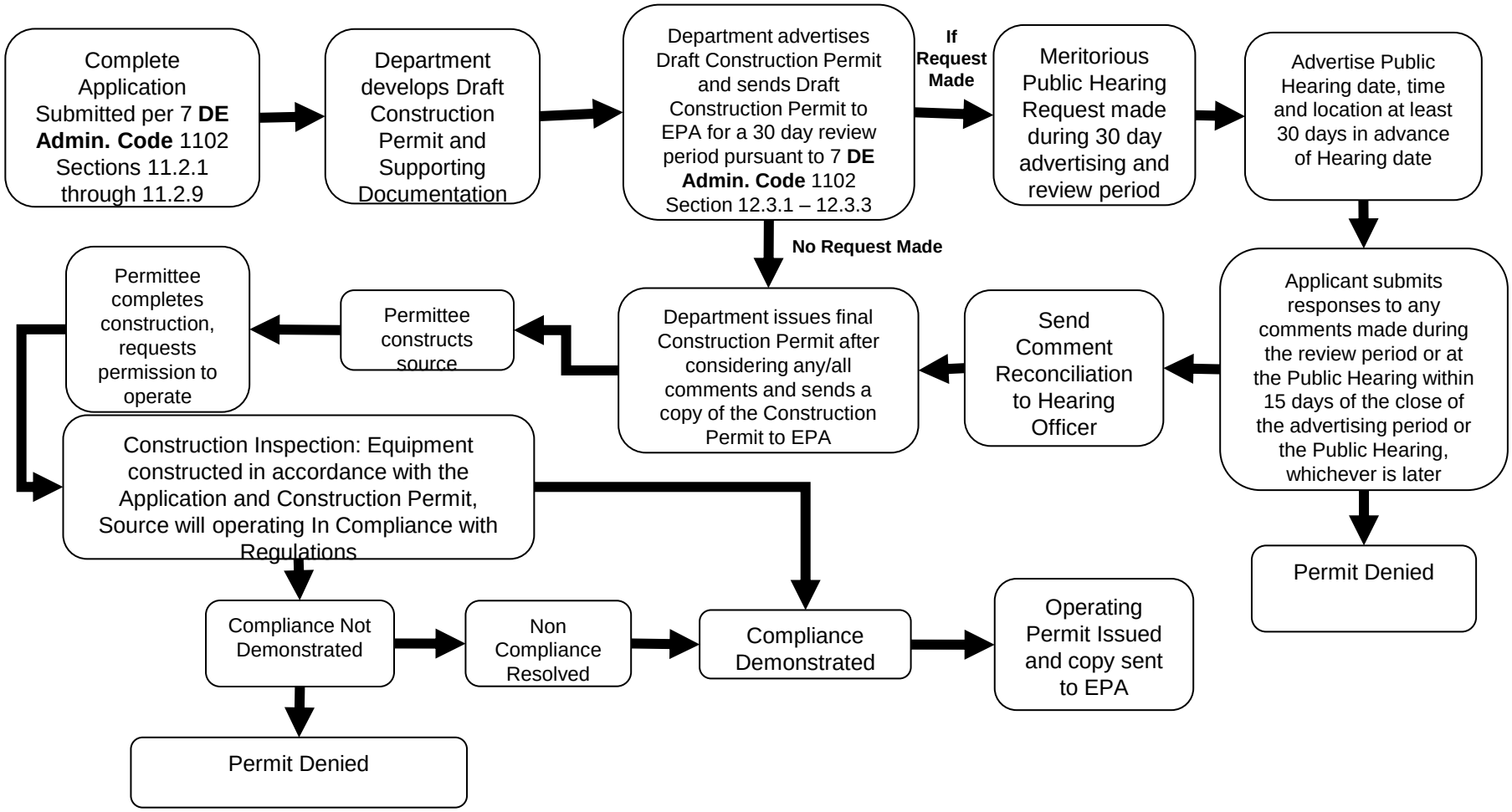
A construction permit allows for:

- Construction, troubleshooting, testing, tweaking, etc.
- NOT OPERATION!
- Once unit is ready to run, a C to O inspection is performed.
  - Equipment matches application and construction permit
  - Equipment in good condition (no leaks, visible emissions, obvious disrepair)
  - Recordkeeping and monitoring procedures are in place
- Permit writers may not give a Company an operating permit during the Construction to Operation Inspection or issue verbal permission to operate

Synthetic Minor Permitting

- Covered under 7 DE Admin. Code 1102 Section 2.1.
- Application requirements are covered under 7 DE Admin. Code 1102 Sections 11.2.1 through 11.2.9.
- Public participation requirements are covered under 7 DE Admin. Code 1102 Sections 12.1 and 12.3.
- The synthetic minor permitting process should be used when the pre-control potential to emit is greater than the major source threshold for one or more pollutants and the facility chooses to take restrictions to reduce the potential to emit to below the major source threshold.
- Synthetic minor permits are issued facility wide, but may limit emissions on an emission unit or process chain basis

Synthetic Minor Permitting



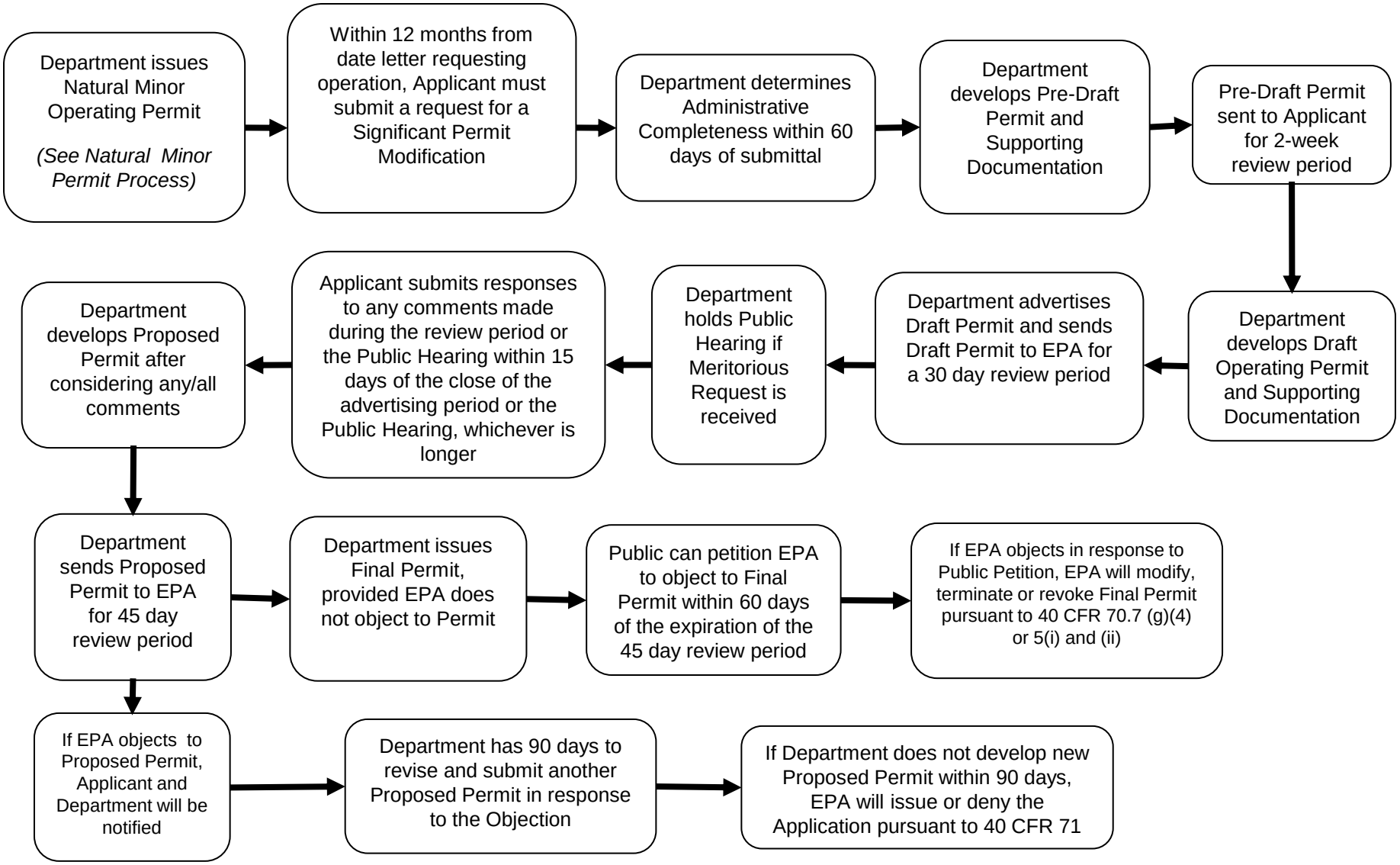
Natural Minor Permit at Title V Facilities

- Standard Natural Minor to TV Process:
  - Apply for a unit specific natural minor permit which is later incorporated into the facility-wide Title V permit
  - Must submit a significant permit modification application within twelve months of issuance of the natural minor operating permit
  - Receive the permit faster, but must go through two legal notice periods
- Federally Enforceable Process:
  - Apply for a unit specific natural minor permit and undergo EPA review period
  - Requirements of the natural minor permit are rolled into the Title V Permit via the administrative amendment process
  - It takes longer to get the permit but only go through one legal notice period

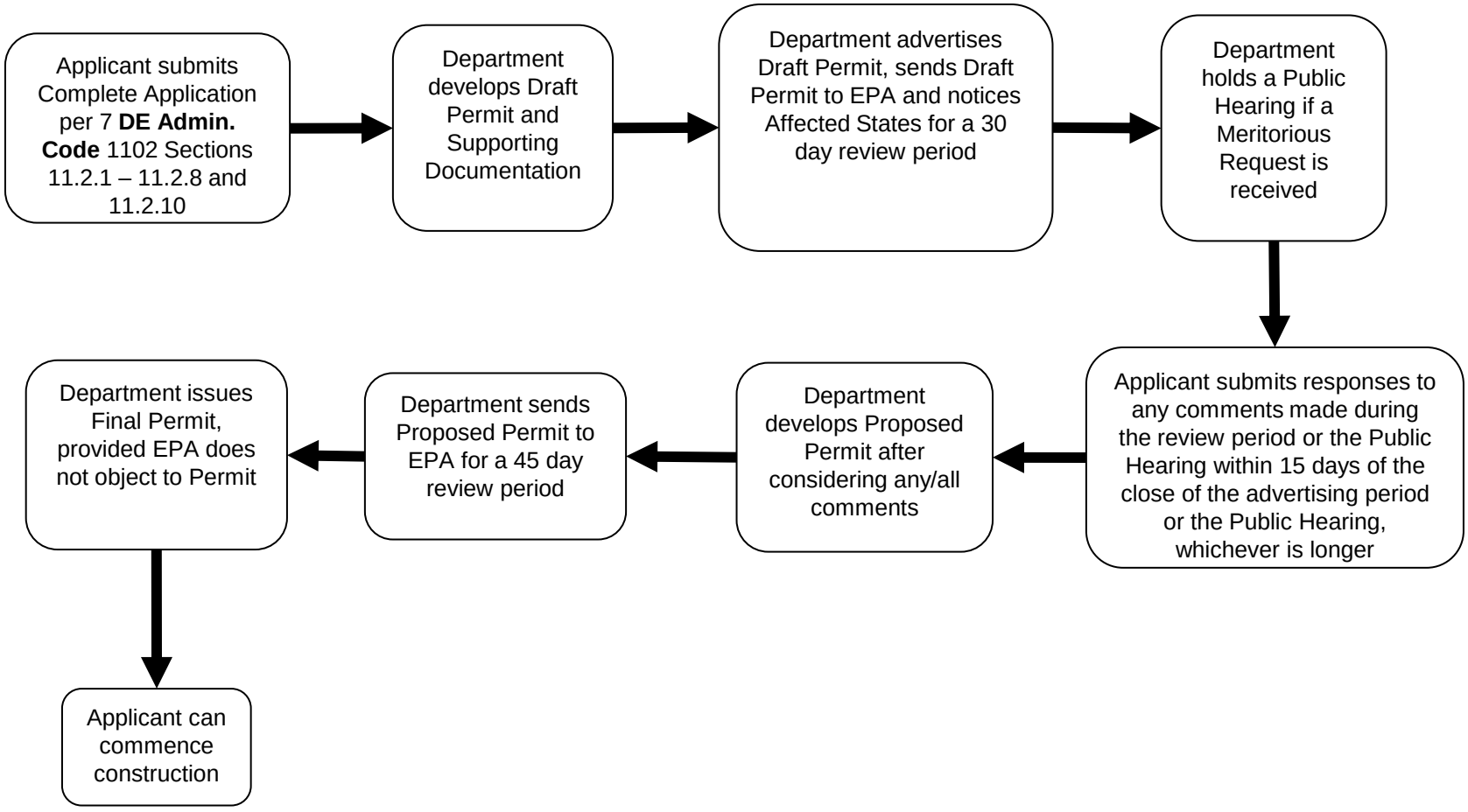
Natural Minor Permit at Title V Facilities

- Standard Natural Minor Permitting Process
  - See Requirements above
- Federally Enforceable Permitting Process
  - Covered under 7 DE Admin. Code 1102 Section 2.1.
  - Application requirements are covered under 7 DE Admin. Code 1102 Sections 11.2.1 through 11.2.8, and 11.2.10.
  - Public Participation requirements are covered under 7 DE Admin. Code 1102 Sections 12.1, 12.4 and 12.5.

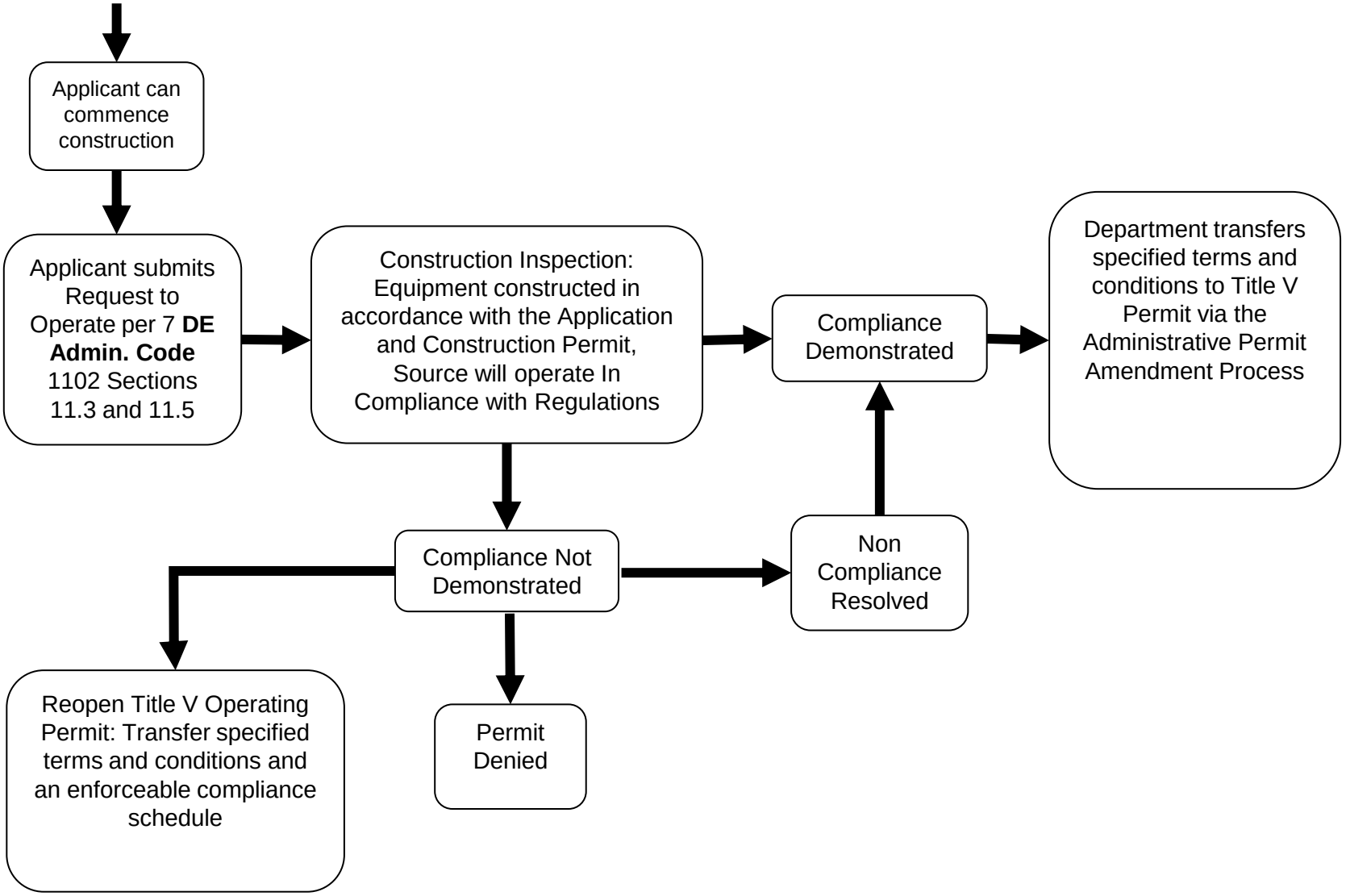
Natural Minor Permit at Title V Facilities – Standard NM Process



Natural Minor Permit at TV Facilities –Federally Enforceable NM Process



Natural Minor Permit at TV Facilities –Federally Enforceable NM Process



Regulatory Review and Modeling

Regulatory Review and Modeling

- A regulatory review must be conducted to determine which regulations apply
- Permit writers must review:
  - Federal Legislation
  - Federal Regulations
  - State Regulations
- Emissions from the proposed source must be modeled to predict downwind impacts

Federal Legislation

- 1970 Clean Air Act
  - National Ambient Air Quality Standards (NAAQS)
  - State Implementation Plans (SIPs)
- 1990 Clean Air Act Amendments
  - Title V program
  - Hazardous Air Pollutants (HAPs) – 187 chemicals identified

Federal Regulations

- 40 CFR (Code of Federal Regulations)
  - Part 60 – New Source Performance Standards (NSPS) (71 major categories, some also have subcategories)
  - Part 61 – National Emission Standards for Hazardous Air Pollutants (NESHAP), emission based (11 categories)
  - Part 63 – Maximum Achievable Control Standards (MACT), technology based (128 categories)

State of Delaware Regulations

- 7 DE Admin. Code 1100: https://regulations.delaware.gov/AdminCode/title7/1000/1100/index.shtml (51 regulations, many with subparts)
- 1102 – Permits
- 1125 – Requirements for Preconstruction Review
- 1130 – Title V State Operating Permit Program
- And many others, many adopt Federal programs
- States can be more strict but never less strict than Federal programs.

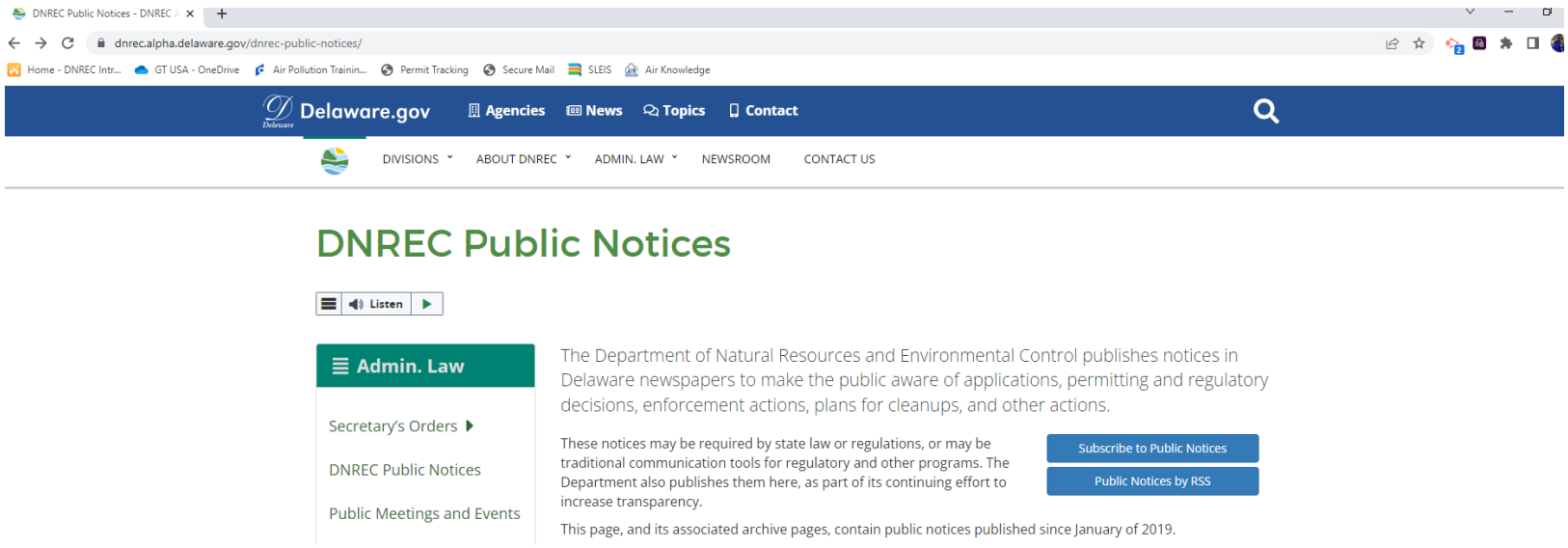
Unique to Delaware…

- Coastal Zone Program
- Minor New Source Review
  - Part of 1125
  - Requires Best Available Control Technology (BACT) at 5 ton per year
- Sulfur in diesel limited to 15 ppm
- Historical non-attainment for ozone limits the major source thresholds
- Generator regulations under 7 DE Admin. Code 1144

Modeling

- Before any permit is issued, computer modeling is conducted to ensure that no negative health effects will occur
- Modeling tools provide a maximum downwind concentration (MDC)
  - The MDC is the modeled concentration of a pollutant found beyond the facility based upon how the stack is configured
- The MDC is then compared to scientifically determined acceptable exposure limits
- If there is a National Ambient Air Quality Standard (NAAQS) for the pollutant the MDC is compared to the Significant Impact Level (SIL) or NAAQS
  - Note that the MDC is compared over different averaging periods, so it may pass for the annual average, but fail the short-term average
- If the pollutant does not have a NAAQS it is compared to the Threshold Limit Value (TLV) or other appropriate standard

Legal Notices



Legal Notices

- The permitting path will determine if the legal notice comes before or after the draft permit is developed
  - Natural Minor permits can go to legal notice before a draft permit is developed
  - Synthetic Minor and Federally Enforceable permits can go to legal notice after a draft permit is developed

DNREC – Division of Air Quality

LEGAL NOTICE

7 **DE Admin. Code** 1102 NATURAL MINOR PERMIT APPLICATIONS

Notice has been given that:

<Insert Company Name>, requests a (insert type of permit) permit to construct or operate <insert type of operation or equipment> at their <insert street address, City and County of> facility. The <insert type of operation or equipment> will be permitted to emit <insert the permitted amount for each pollutant> by Permit# <insert Permit Number>.

The application for this permit may be reviewed upon request. The application is posted at https://de.gov/dnrecnotices. To submit comments, for additional information or for information regarding how you can inspect the application, please contact Tracy Mattson at (302) 739-9402.

A public hearing on any of the above applications will NOT be held unless the Secretary of DNREC receives a request for a hearing regarding that application within 15 days from the date of this notice, ending >>>>. A request for a hearing shall be in writing. The request must also show a

Legal Notices

- Legal notices must include:
  - The facility name
  - The facility location
  - Permitted equipment or changes being made
  - Permitted emissions
  - The permit number
  - Standard boilerplate language
- Legal Notices are sent to the News Journal and State News
- Legal Notices are posted on the DNREC website:
  - https://dnrec.alpha.delaware.gov/dnrec-public-notices/
- Legal Notices will be emailed to registered parties
  - https://dnrec.alpha.delaware.gov/subscribe/

Public Hearing

- Advertised 20 or 30 days in advance
- Previously, an in-person meeting;
- Now, a WebEx virtual meeting.

Public Hearing Follow Up

- The comment period stays open for at least 15 days
- The Division of Air Quality will respond to comments via a technical memo
- The hearing officer will draft a report
- The Secretary will make a decision
- If the decision is to issue the permit with changes, then the normal process resumes

Permit Numbers

What is the Facility ID?

- Each Facility has a unique identifier
  - The first two digits represent Delaware
    - 10
  - The next three digits represent the County
    - 001 – Kent County
    - 003 – New Castle County
    - 005 – Sussex County
  - The last five digits are the order in which they came into the program
- Indian River Power
  - 1000500001
  - Located in Delaware
  - Located in Sussex County
  - The first facility permitted in Sussex County

Natural Minor Permit Numbering

- Natural Minor Permits
  - APC-xxxx/xxxx-Construction or Operation or Construction/Operation
    - The first 4 digits are the fiscal year the application was received
    - The next four digits are the order in which the application was received
    - (Amendment X) may be added at the end for permit amendments
- Registrations
  - APC-xxxx/xxxx-Registration

Synthetic Minor Permit Numbering

- APC-xxxx/xxxx-Construction or Operation or Construction/Operation (SM)
  - The first 4 digits are the fiscal year the application was received
  - The next four digits are the order in which the application was received
  - (Amendment X) may be added at the end for permit amendments

Title V Permit Numbering

- AQM-xxx/xxxxx
- Based upon Facility ID
- May have (Revision X) to demonstrate amendments
- May have (Renewal X) to demonstrate renewals
- Indian River Example
  - AQM-005/00001-Renewal (02) Revision (03)

Permit Number Descriptors

- AMENDMENT X: Used when amending existing equipment covered by a permit
- CONSTRUCTION: Used when equipment is added to a facility or a change is made to existing equipment that requires a physical change to the equipment
- OPERATION: Used once equipment has been installed or updated and a construction to operation inspection has occurred
- CONSTRUCTION/OPERATION: Used when a permit is issued for existing equipment
- FE : Used for a federally enforceable 1102 permit that will be transferred into TV Permit by administrative amendment process
- SM: Used for a federally enforceable 1102 permit where restrictions have been taken to avoid being subject to 1130 permitting
- PTE: Used for an 1102 permit where restrictions have been taken to avoid being subject to 1125 Section 2, 3 or 4 permitting
- EOP: Used for an 1102 permit that is subject to 1125 Section 2
- NESHAP: Used for an 1102 permit that is subject to a NESHAP – 40 CFR Part 61

Permit Number Descriptors

- PSD: Used for an 1102 permit that is subject to 1125 Section 3
- MNSR: Used for an 1102 permit that is subject to 1125 Section 4
- GACT: Used for an 1102 permit that is subject to any GACT – 40 CFR Part 63
- MACT: Used for an 1102 permit that is subject to any MACT – 40 CFR Part 63
- NOX RACT: Used for an 1102 permit that is subject to 1112
- VOC RACT: Used for an 1102 permit that is subject to any section of 1124
- NSPS: Used for an 1102 permit that is subject to any NSPS – 40 CFR Part 60
- CO2: Used for an 1102 permit that is subject to 1147
- CAIR: Used for permits subject to 40 CFR Part 97 (CAIR)
- IV: Used for permits subject to 40 CFR Part 75 (Acid Rain)
- I: Used for permits subject to NOx Budget (1139)

Permit Expiration

- Construction permits may not be issued for longer than 3 years
- An extension to a construction permit can only be made if the original construction permit granted a construction period of less than three years
- If the construction period has exceeded three years, the original construction permit must be cancelled, and the Company must reapply for a new construction permit
- An extension should never be granted if the extension date will exceed 3 years from the original date of issuance
- An extension request or new permit application must be submitted 45 days in advance of the permit expiration date

Drafting Memos

MEMORANDUM

TO: Administrator

THROUGH: Program Manager I

FROM: Engineer/Scientist

SUBJECT: **Company Name**
Facility Name
Permit: APC-XXXX(/XXXX-CONSTRUCTION *<insert as appropriate (Amendment X)(VOC RACT)>*
Equipment Name/Title

DATE: *<month, day, year (4 digit)>* Hard Date, Not Date Code

<Insert Company Name> requested a *<Construction and/or Operation>* Permit for *<describe change(s)>*.

Provide a general description of the source including:

- What the source does
- A list of emission units
- The source's major source status for:
  - NSR
  - PSD
  - Air toxics
- Facility Wide PTE for each pollutant emitted. See the table below

Pollutant	Facility Wide PTE (tons/year)	Major Source Threshold (tons/year)
Nitrogen Oxides (NO_x)		25 *<100 if Sussex>*
Volatile Organic Compounds (VOCs)		25 *<50 if Sussex>*
Carbon Monoxide (CO)		100
Particulate Matter (PM)		100
Particulate Matter Less Than 10 Microns (PM_{10})		100
Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$)		25
Sulfur Dioxide (SO_2)		100
Lead		10
Carbon Dioxide Equivalent (CO_2e)		100,000
Other (list)		
<add or delete rows if necessary>		

- Whether the source is a Title V source and how the requirements of this permit will be incorporated.

Confidentiality Statement *Ex. The Company has/has not requested confidentiality.*

Coastal Zone Statement *Ex. The Company is/ is not located within the Coastal Zone. A Coastal*

Drafting Memos

- Every Permit is accompanied by a technical memorandum
- The technical memo is written before the permit is written
- The technical memorandum provides the basis for each permitting decision
- The technical memorandum is part of the public record
- Technical memos must include:
  - Detailed emission calculations.
  - Detailed modeling including the parameters used in the modeling, the pollutants modeled, the hourly emission rates, the resulting maximum downwind concentration and the results of the comparison to screening criteria
  - Detailed regulatory analysis
  - An underlying basis for each permit condition in the permit.
- The technical memo provides written documentation of all permitting decisions. It is NOT subject to comment.

Drafting Permits

Hard Date – Not Date Code

Permit: APC-XXXX/XXXX-CONSTRUCTION <insert as appropriate (Amendment X)(VOC RACT)>

Company Name
Process Description
Facility Name
Street Address *<Use mailing address if street address is different. The street address is mentioned in paragraph 1>*

ATTENTION: Contact Name *<Responsible Official or Environmental Coordinator>*
Contact Title

Dear Mr./Ms. XXXXXX:

Pursuant to 7 **DE Admin. Code** 1102, Section 2, approval of the Department of Natural Resources and Environmental Control (the Department) is hereby granted for the construction of *<insert equipment description and associated air contaminant control device(s)>* located at the *<insert facility name>* in *<insert location city>*, Delaware, in accordance with the application submitted on Form Nos. [AQM-1] and [AQM-2, AQM-3.1, etc.] dated *<month, day, year (4 digit)>* signed by *<Name, Title>*, and letters dated *<Month, day, year (4 digit)>* signed by *<Name, Title>*.

This permit is issued subject to the following conditions:

1. General Provisions

1.1 This permit expires on <insert date>. <Use the following sentence if the construction permit is not approaching three years: If the equipment covered by this permit will not be constructed by <insert date> a request to extend this construction permit must be submitted by <insert date minus 45 days>>. <Use the following sentence if the construction permit is approaching three years: If the equipment covered by this permit will not be constructed by <insert date>, an application for a new construction permit must be submitted by <insert date minus 45 days>>.

1.2 <If the facility is taking limits to avoid MNSR use the following condition> The operational limitations of Condition <insert condition numbers> are voluntary restrictions to limit <insert pollutants that are being restricted> emissions to below the five (5) ton per year applicability threshold of 7 **DE Admin. Code** 1125, Section 4, *Minor New Source Review*. The owner and/or operator shall meet the control technology requirements of **7 DE Admin. Code** 1125, Section 4, *Minor New Source Review* if an increase in the operational

Permit Structure

- Each process has its own permit containing the following:
- Opening paragraph
- General Provisions
- Emission Limitations
- Operational Limitations
- Testing and Monitoring Requirements
- Recordkeeping Requirements
- Reporting Requirements
- Administrative Conditions

Opening Paragraph

- Contains the basis of the permitting decisions
- Includes:
  - A description of the equipment
  - The location of the equipment
  - All of the permit applications and correspondence used to develop the permit

Dear Mr./Ms. XXXXXX:

Pursuant to 7 **DE Admin. Code** 1102, Section 2, approval of the Department of Natural Resources and Environmental Control (the Department) is hereby granted for the construction of *<insert equipment description and associated air contaminant control device(s)>* located at the *<insert facility name>* in *<insert location city>*, Delaware, in accordance with the application submitted on Form Nos. [AQM-1] and [AQM-2, AQM-3.1, etc.] dated *<month, day, year (4 digit)>* signed by *<Name, Title>*, and letters dated *<Month, day, year (4 digit)>* signed by *<Name, Title>*.

General Provisions

- Condition 1 in natural minor, synthetic minor and federally enforceable permits
- Includes:
  - Permit expiration
  - Right of entry
  - Permit transfer requirements
  - Other standard conditions

Emission Limitations

- Condition 2 in natural minor, synthetic minor and federally enforceable permits
- Each permit should have emission limitations for the following pollutants:
  - All criteria pollutants
  - Any other regulated air pollutants
- Each permit should have both short term (lbs/hr) and long term (tons/year) emission limitations
- All emission limitations should be supported by practically enforceable operational limitations
- All emission limitations should be based upon appropriate emission factors

Operational Limitations

- Condition 3 in natural minor, synthetic minor and federally enforceable permits
- Limitations affecting how a process can be operated:
  - Operating hours
  - Raw materials
  - Required controls
  - Etc.
- May be required by regulation
- May be required for Practical Enforceability
- May be required based upon past compliance history, environmental complaints, or public comment

Practical Enforceability

- All emission and operational limitations must be “enforceable as a practical matter”
- Simply stating that emissions must not exceed 0.5 lbs/hr is not enforceable
  - Operational limitations such as filter efficiency, destruction efficiency, etc. are required
  - Stack testing may be required to support the limitations
- Operational limitations will require monitoring and record keeping requirements to ensure practical enforceability
- Conditions added to provide practical enforceability may be added in addition to regulatory requirements

Testing and Monitoring Requirements

- Condition 4 in natural minor, synthetic minor and federally enforceable permits
- May be required by regulation
- May be required for Practical Enforceability
- May be required based upon past compliance history, environmental complaints, or public comment

Record Keeping Requirements

- Condition 5 in natural minor, synthetic minor and federally enforceable permits
- May be required by regulation
- May be required for Practical Enforceability
- Every emission limitation, operational limitation and testing and monitoring requirement will have a corresponding record keeping requirement

Reporting Requirements

- Condition 6 in natural minor, synthetic minor and federally enforceable permits
- May be required by regulation
- May be required for Practical Enforceability
- Note: All permits contain the following requirement:
  - Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery by calling the Environmental Emergency Notification and Complaint number, (800) 662-8802.

Administrative Conditions

- Condition 7 in natural minor, synthetic minor and federally enforceable permits
- Standard conditions in all permits

7.1 This permit supersedes **Permit: APC-XXXXXX**. *<delete this if you are not superceding any permits. Please note that construction permits and previous versions of a permit (i.e. Amendment X-1) should be superceded.>*

7.2 This permit shall be made available on the premises.

7.3 Failure to comply with the provisions of this permit may be grounds for suspension or revocation.

Replacement in Kind

- DAQ receives many request for off permit “replacement in kind”
- Replacement in kind is exempt from permitting in 7 DE Admin. Code 1102 Appendix A(9) and states:
  - Maintenance, repair, or replacement in kind of equipment for which a permit to operate has been issued.
- There is no regulatory definition for replacement in kind
- DAQ must evaluate on a case-by-case basis
- When in doubt DAQ errs on the side of permitting

Changes that Do NOT Qualify for Replacement in Kind

- Replacement of an entire process unit
- Replacement that results in the essential components of the emission unit being replaced through several planned partial replacements
- Replacement that would circumvent or contribute to the circumvention of any emission control requirement found in 7 DE Admin. Code 1125, any New Source Performance Standard or any Maximum Achievable Control Technology Requirement
- Replacement that would result in the modification or reconstruction of a process unit

QUESTIONS?

Contact Information

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